Castlemaine Naturalist

November 2023

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Monthly newsletter of the
Castlemaine Field Naturalists Club Inc.

Brush-tailed Rock Wallaby
Photo: Antoni Camozzato,

November Meeting Report: Speaker, Kailee Savoia
'The Grampians Ark Project –
Landscape-scale predator control for threatened fauna recovery.

Kailee Savoia has been with Parks Victoria for five years working on environmental projects and is currently in Halls Gap, the Grampians National Park (Gariwerd), working on the Grampians Ark Project which is part the 'Weeds and Pests on Public Land (WPPL) program.

Funded by the Victorian Government, the WPPL program operates in different sections of the state. In Gariwerd, the target pest species are the European Red Fox and feral cats. However after the successful reintroduction of the Brush-tailed Rock-wallaby in 2008, the current focus is on gathering density and distribution data on fox and feral cats. Such data will ensure that management efforts are achieving the intended outcomes.

Foxes were introduced to Australia in 1855. They now occupy over 75% of the continent and are listed as a 'Key Threatening Process'. Feral cats are exceptional hunters and are true carnivores. Current population estimates range from 5-18 million! Every year cats in Australia kill a staggering – mammals, 1,067 million; birds, 399 million; reptiles 609 million; frogs, 92 million! Cats hunt prey up to 5kg with one 6kg victim recorded. In 2018 cats were declared a pest on public land.

Other threats such as feral goats and deer, invasive weeds and fire add to the risks.

The native species at highest risk are Brush-tailed Rock-wallaby (*Petrogale penicillata*), Long-nosed Potoroo (*Potorous tridactylus*), Southern Brown Bandicoot (*Isoodon obesulus*), the Heath Mouse (*Pseudomys shortridgei*), and the Smoky Mouse (*Pseudomys fumeus*).

In Victoria the use of 1080 for the control of feral cats is prohibited. The use of 1080 is restricted to the use of foxes, wild dogs, rabbits and feral pigs.

Curiosity® is designed to target feral cats and limit risks to native species. The bait is a skinless sausage containing a small hard plastic pellet, which contains the toxin

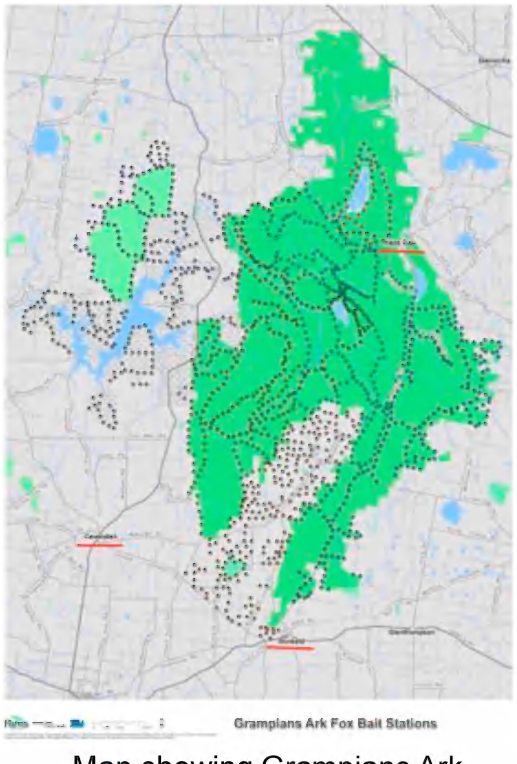
(PAPP). The pellet is designed to dissolve in the stomach of the feral cat, who tend to swallow large chunks of food as they do not have grinding molars.

Research demonstrates that most native animals will reject the plastic pellet as they tend to nibble and chew their food. However the supply and use of PAPP for the control of declared feral cats has been restricted to persons, such as Parks Victoria operating under a specific permit issued from Agriculture Victoria.

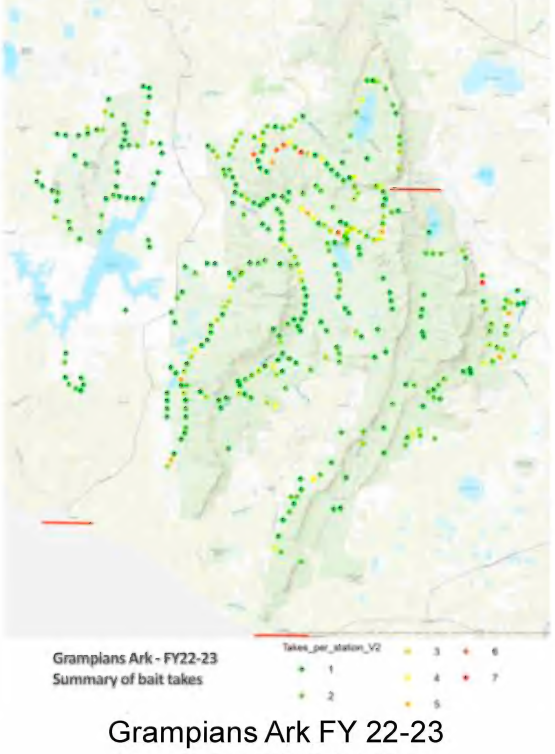
Other methods of cat control include using 'Felixers'. These grooming traps are box-like units which uses a camera and AI to distinguish feral cats and foxes from native animals by their shape and then spray toxic (1080) gel onto the animal. The feral cat dies after licking/grooming itself to remove the gel. However, 1080 is not approved for use in Victoria and PAPP is not yet developed for this procedure. A permit is required to use soft-jaw leg hold traps. Shooting and cage trapping are labor intensive and have low success rates.

The baiting program for foxes is founded on research in collaboration with The Centre for Integrative Ecology, (CIE) Deakin University. Motion sensor cameras were used to test whether cat and fox detectability was greater for 'on-road' compared to 'off-road' habitats[1]. The results suggest both pest species show a strong preference for roads and that baiting programs targeting internal roads can be an efficient approach for landscape lethal control. The Grampians Ark project delivers fox control across 226,000 hectares of the Grampians National Park and surrounds. Baits are placed fortnightly and private land baiting around the park is done in conjunction with Landcare Groups. An analysis of 'Daily % Bait Take per Season, 2003-2020' showed a significant decline following the Mt. Lubra fire of 2006 and a significant increase following the drought breaking rains of 2010.

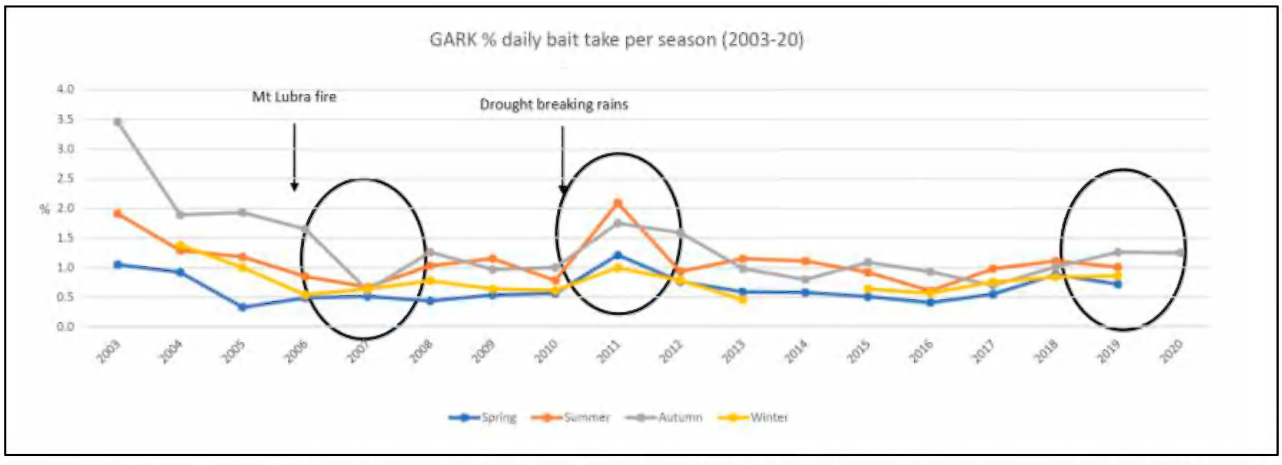
Research data shows that surveys targeting roads can be an efficient approach for determining if landscape-scale lethal control is effective.[1] Therefore, pending



Map showing Grampians Ark Fox Bait Stations



Grampians Ark FY 22-23 Summary of bait takes



approval, an aerial baiting project using Curiosity®(PAPP) is planned for 2023/24. The operation would last for 2 days in mid-winter. Baits will be laid at 8 baits per km^2 covering approximately 30,000 hectares.

Together with CIE, other factors are being assessed as to how pest and native species are being impacted:- Climate change, fire regimes, rainfall and predation. In particular refugia. During drought times, areas can be identified where moisture persists in gullies etc[2]. The protection and persistence of these refugia is critical for management decisions and control efforts on these during times of climatic stress.

Baiting plan for 2023/2024

Following the good rainfalls over the last seasons some pleasing rewards have been recorded. More Long-nosed Potoroos have been captured on cameras and 2 individuals trapped and tracked for the first time in nearly 20 years. Good numbers of Southern Brown Bandicoots have also been captured.

A special focus on the Brush-tailed Rock Wallaby showed a decline in survival of the individuals re-introduced in 2008-2012 due to fox predation and physical disturbance. In 2019 non-invasive monitoring techniques such as camera monitoring and DNA testing of scats indicates that leaving the colony undisturbed for several years correlated with improved adult survival, increased breeding and successful recruitment of young to the population[3].

As for many conservation groups there are challenges to ongoing projects. For PV funding is allocated over 3 to 4 years. This restricts their ability to adapt and proactively manage pest and weeds and plan long term.

Permits and risk assessments for implementing management plans is time consuming but necessary e.g. cat baiting using Curiosity® is done during winter so that reptiles are not targeted.

It is also pleasing to note that the Northern Grampians Shire received no push back from the Halls Gap residents to the banning of domestic cats.

1 Geyle et. al. Evaluation of camera placement for detection of free-ranging carnivores; implications for assessing population changes. Ecol Solut Evid. 2020;1:e12018

2. White J, et al. Can NDVI identify drought refugia for mammals and birds in mesic landscapes? Science of The Total Environment, (2022) 851 Pages 1-10.

3 S. Kleemann et.al. Non-invasive monitoring and re-introduction biology of the Brush-tailed Rock Wallaby (Petrogale penicillate) in the Grampians National Park, Australia.

Australian J. of Zoology, 69(2):41-54 (2022)

Jill Williams

CFNC October Excursion – Living Treasures of Maldon

Around 15 of us gathered in Maldon on Saturday Oct 14. We met up with MULGA secretary Bev Phillips at the Rotunda. MULGA is the Maldon Urban Landcare Group Inc, established in 1992, one of the first such groups in Victoria. The Living Treasures in this case are Eucalypt trees that were already growing in 1852, pre-European settlement.

After an introductory talk, Bev then took us on a very pleasant walk around the town, inspecting and admiring many ancient Eucalypts (ranging from 180 to 650 years old!) in several specific areas where they have survived. Bev gave us a good overview

Bev & colleague measuring circumference of Grey Box *E. macrocarpa* 380 yrs.
Photo: Cathrine Harboe-Ree

Red Box *Eucalyptus polyanthemos* 435 yrs. *Photo: Bev Phillips*

of how these trees survived, what challenges and threats exist currently, and into the future. We were provided with samples of adult and juvenile leaves and nuts and fruit (where Bev was able to find them for us) of the four indigenous Box trees in Maldon – Grey (*Eucalyptus microcarpa*), Red (*Eucalyptus polyanthemos*), Yellow (*Eucalyptus melliodora*) and Long-leaved (*Eucalyptus goniocalyx*), and also Yellow Gum (*Eucalyptus leucoxylon*). We looked at Yellow Gums mainly to see the differences

between them and River Red Gums (*Eucalyptus camaldulensis*). We were shown various ways of identifying these species, not always simple or straightforward! Bev also described the method MULGA uses to determine the age of these trees, which involves measuring their girth. The method MULGA uses applies only to the Box trees – other Eucalypts grow at a different rates, but all the Boxes have a similar rate of growth.

We were highly impressed by the clearly significant research done on these grand old trees and by the advocacy Bev and MULGA undertake on their behalf. Wendy French carried out important initial research in 2009-10. From 2017 MULGA has extended Wendy's work, and this is an ongoing process. Maldon town has over 100 Box Eucalypt trees aged from 180-650 years!

The data and location for all 341 pre-1852 eucalypts surveyed are now entered on the Victorian Biodiversity Atlas.

Grey Box *Eucalyptus macrocarpa* 650 Yrs. *Photo: Jenny Rolland*

The Maldon Visitor Information Centre has a brochure called Living Treasures, which contains a lot of information and a map for some of the pre-1852 trees in central Maldon.

Also, more in-depth information online at:

Maldon Urban Landcare Inc. (MULGA) – Connecting Country

Brian Cutler

Observations

Marli Wallace and Jackie Moore visited Heatherlie Quarry in Gariwerd (the Grampians) and enjoyed the variety of wildflowers – the Grampians Thryptomene (*Thryptomene calycina*), Nodding Greenhoods (*Pterostylis nutans*) and especially Mosquito orchids (*Acianthus pusillus)* and the Small Gnat-orchid (*Cyrtostylis reniformis*). On the return journey they saw Blunt Greenhoods (*Pterostylis curta*) at Beehive Falls, Red Beaks orchids (*Pyrorchis nigricans)* not yet in flower and Grass Trees (*Xanthorrhea australis*) in the Devils Garden State forest and Stately Helmet orchids (*Corybas diemenicus*) close to Fyans Creek.

Grampians Thryptomene *Photo: Jackie Moore*

Red Beaks orchids
(*Pyrorchis nigricans)*
Photos: Jackie Moore

Mosquito orchids
(*Acianthus pusillus)*

Grass Trees
(*Xanthorrhea australis*)

Meanwhile Yvonne Hsu had close encounters of another kind. In the Mornington National Park near Cape Schanck, a tiger snake consuming a Ringtail possum while on the side of Tree Fern Gully Track in Mt. Dandenong, a lyrebird in front of it's nest.

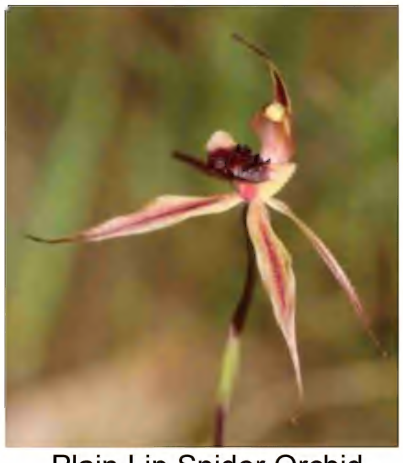
Tiger snake with Ring Tail possum
Photo: Yvonne Hsu

Lyrebird in front of nest
Photo: Yvonne Hsu

Similarly Russell Stanley had a stand-off with a tiger snake near Fryerstown but found and recorded several orchids around Taradale.

The Wax Lip Orchids (*Caladenia (Glossodia) major*) are on the way out now with many pollinated and closing up. The Scented Caps (*Caladenia moschata)* are on the rise, with more flowering each time I've visited. He only found one Plain Lip Spider Orchid (*Caladenia clavigera)* which had disappeared by his second visit (probably eaten). A small colony of Ornate Fingers (*Caladenia ornate)* was a nice find, with their richly coloured labellum distinguishing them from the quite common Pink Fingers (*Caladenia carnea)*. It took a while but he finally found some Peakall's Bird Orchids (*Chiloglottis peakallii)*. This is a newly named species (2021) split from the Common Bird Orchid on the basis of its pollinating wasp; physically both orchids are identical!

Peakall's Bird Orchid
Chiloglottis peakallii



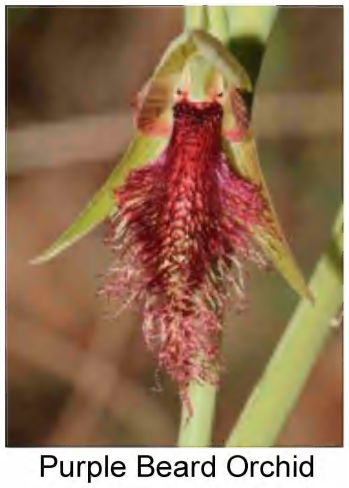
Plain Lip Spider Orchid
Caladenia clavigera

Most Beard Orchids (*Calochilus robertsonii)* are yet to open, but Russell was lucky to find a lovely freshly opened specimen.

Photos Russell Stanley

Leonie Postle sighted what appears to be a leucistic form of the Purple Beard Orchid (*Calochilus robertsonii)* on the side of the Castlemaine – Maldon road.

Purple Beard Orchid
Calochilus robertsonii
Photo: Leonie Postle



Purple Beard Orchid
Calochilus robertsonii
Photo: Russell Stanley

Annual Challenge Bird Count – 2022 recap and 2023 invitation

By Chris Timewell

The Annual Challenge Bird Count (ACBC) commenced more than three decades ago as a fun end-of-year activity for amateur birdwatchers and birding/naturalist groups across Australia. The 'challenge' is to get groups of people to see how many birds they can collectively detect and count within their local area (25km radius) within a calendar day. The nation-wide event was originally coordinated by the Bird Observers Club of Australia, and since the merger with RAOU in 2012 it has since been taken over by a volunteer representative of BirdLife Australia (currently Adriana Bianchi).

The Castlemaine Field Naturalists Club have been part of this event from its earliest days – with our team first coordinated by Ern Perkins, then Chris Morris and now by me. During the COVID years of 2020 and 2021, the whole event was cancelled. In 2022, we were led to believe that the event was to be cancelled again – but only weeks beforehand it was reinstated. As noted in an article within the April 2023 edition Castlemaine Naturalist, it was too late to arrange for the CFNC to participate,

but Kerrie Jennings and myself (with help from a couple of others) undertook own small search covering part of Baringhup, Maldon and Newstead.

For 2023, it would be great to have CFNC members involved again. As well as being an enjoyable day of birdwatching, it is also an opportunity to undertake valuable bird surveys in the local area. Rare and unusual species for the area are detected in most years, and it also provides an indicator of local bird health when compared to the findings from past years. Please let me know if you are interested, and I can send you relevant details. In short:

- The searches need to be conducted within a single calendar day, or part thereof. This is preferable on either Sat 2 Dec or Sun 3 Dec – but can be conducted on a day occurring up to a week on either side.
- The bird searches are done in small groups – no less than 2 people, and ideally 3 or more. You can either arrange your own group, or I can help you to join with others to form a group. For less experienced birdwatchers, there will be opportunities to join a group with more experienced birders.
- I will help oversee the locations being checked, particularly to avoid double-ups, but also to minimise geographic gaps. It's usually a good approach to visit a mix of habitats within the day – woodlands, wetlands, gardens, paddocks, etc. to get a high variety of bird species.

In 2022, there were 18 teams participating from across Australia and its territories, of which exactly half were from country Victoria (Table 2). Three-hundred and thirty species were recorded in total, comprising 32,893 individual birds. Thirteen of the species detected in 2022 had never been recorded during the ACBC in past years – all of these were from the external territories of Cocos Keeling Island and Christmas Island.

With our small 'Maldon' team, our contribution was relatively minor (Table 1 - 61 species and 287 individuals) – although our sighting of a White-backed Swallow in Baringhup was notable, as no other team detected this species in 2022. In both 2018 and 2019, the Castlemaine area detected 107 species, with 1840 and 2306 individual birds respectively.

Table 1. Summary of bird sightings by country Victorian ACBC teams in 2022

Location	# of species	# of individual birds
Ballarat	120	3261
Gippsland East	143	8098
Horsham	129	3483
Latrobe Valley	81	1563
**Maldon*	*61*	*287*
Portland	118	5013
Roslynmead (include Echuca-Moama)	75	1006
Warrnambool	36	340
Yea River Trail	40	222
TOTAL	***217***	***23,273***

Table 2. Number of individual birds seen across Australia by ACBC teams in 2022

Location (# of teams)	# of species	# of individual birds
External Territories (2)	58	1510
Greater Melbourne (3)	122	3213
**Country Victoria (9)*	*217*	*23,273*
NSW (3)	80	612
Queensland (1)	143	4285
Elsewhere in Aust (0)	0	0
TOTAL (18)	***330***	***32,893***

Great Southern BioBlitz 2023 Castlemaine Region 24th to 27th November 2023

Mex Woodward

Block out your diaries and rally your friends, the 2023 Great Southern BioBlitz is fast approaching. Castlemaine Field Naturalists Club is the project host for our local area and Club members and all others are encouraged to participate. This annual event is an intensive four-day effort by citizen scientists across the southern hemisphere to record all living species. Apart from being great fun, every one of us can contribute to the hugely important task of mapping species, their locations and numbers, and assist scientists in their work for biodiversity.

CFNC member Yvonne Hsu down close and personal with nature
Photo: Jenny Rolland

The GSB runs on the online platform iNaturalist, a global online network where citizen scientists, naturalists and biologists upload their photos or audio recordings and help each other identify the species.

For more information visit the Castlemaine Region Great Southern BioBlitz website on iNaturalist. During and after the BioBlitz this is where your observations will appear and identification activity will happen.

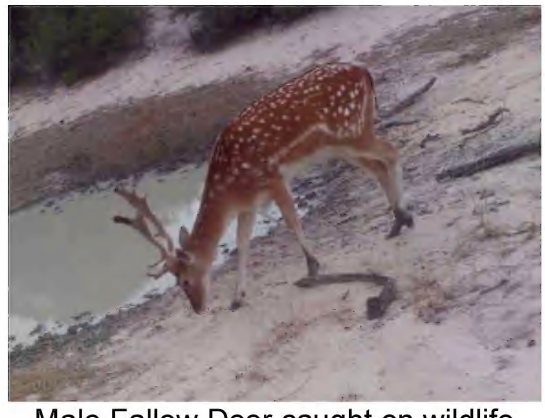
https://inaturalist.ala.org.au/projects/great-southern-bioblitz-2023-castlemaine-region

Feral Deer in Victoria – record your sightings!

There are currently four species of feral deer present in Victoria. All were introduced more than a century ago and their numbers have gradually increased until in the last decade their numbers have exploded. Recent research in Victoria has found that without control they have the potential to double their population approximately every two years. Clearly this growth rate is unsustainable for both our farming areas and

our natural areas. Deer pose a significant risk to biodiversity, water quality, public safety, agriculture, biosecurity and indigenous cultural heritage sites.

During 2022 the Victorian Government undertook the development of a Deer Control Strategy for the whole of Victoria, with specific documents for the Melbourne region, eastern Victoria and western Victoria. This strategy was released earlier this year and control measures are now starting in some areas. None too soon!



Male Fallow Deer caught on wildlife camera. *Photo: Euan Moore*

The most common species of deer in our region is the Fallow Deer. These are relatively small deer. The colour can range from dark brown to almost white. Many are a red-brown with white spots. They are of European origin. It is likely that they could survive across most of western Victoria. The other species of deer that may occur in our area are Red Deer and Samba Deer. The National Feral Deer Action Plan has a guide to deer identification at:

https://feraldeerplan.org.au/identifying-deer-species/

Bark stripped from a cypress pine by deer rubbing their antlers. Photo: Euan Moore

Because of the considerable environmental and economic damage that deer can cause, the club urges you to report any sightings of feral deer on the **FeralScan app** or the associated website. The app is easy to use. The app records the location of your sighting but allows you to obscure the location if you are worried about privacy so that only people working on the official deer control program can access the actual location. When recording a sighting or damage you answer a number of simple questions about the deer or deer sign that you have seen and can optionally load photos. You don't need to know the deer species. Deer sign may include tracks, faecal pellets, wallows or damage to vegetation caused by rubbing (photo) or heavy browsing.

By reporting your sightings you will assist those working on deer control and with identifying priority areas.

Note: In recent weeks I have seen deer tracks in the Fryers Ridge area and earlier this year saw a mob of deer near Dunolly. I have also heard reports of deer near Maldon and in the Muckleford Forest. Euan Moore

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club

COMING EVENTS

Monthly Meeting: Friday 10th Nov, 7.30pm, Uniting Church Chapel, Lyttleton St.

Speaker: Sophie Bickford, Central Victorian Biolinks Alliance,

"Community-connected Conservation across Central Victoria"

The Central Victorian Biolinks Alliance's vision is to restore and reconnect large landscapes across public and private land in Central Victoria to halt environmental and species decline. Partnerships with community environment groups extend from the Grampians across to the Australian Alps and from the Dividing Ranges to the Murray River. Executive Director Sophie Bickford will explain how the Alliance is working to scale-up ecological restoration by delivering a range of innovative pilot projects to demonstrate effective landscape repair techniques, and to catalyse their broader uptake in the region. These projects include targeting "leaky landscapes", reconnecting woodlands and waterways, and restoring habitat for threatened species such as Brush-tailed Phascogales, Gliding Possums and Mallee fowl.

Excursion: Saturday 11th Nov, 1.00pm. "Managing Remnant Vegetation"

Leader: Ian Higgins

The site we will be visiting is grazing land that is has never been ploughed or substantially worked. It is being managed for conservation of Golden Sun-moth but it has, or has had, substantial plant diversity, located as it is on the edge of basalt country. The Atlas of Living Australia lists almost two hundred different plant species, some of which, such as the rare Button Wrinklewort, (*Rutidosis leptorhynchoides*), are threatened or close to local extinction, so it will be interesting to see what we can find.

For a change of scenery, we plan to have afternoon tea at nearby Mt Cameron Gorge.

Meet: for **1.00pm** departure from the Octopus car park (Duke St, opposite the Castle Motel).

Bring: water, afternoon tea, sturdy clean shoes and sun protection.

Boot hygiene: We will spray the soles of our boots with Phytoclean on arrival at the excursion site.

The Field Trip will be cancelled in extreme weather conditions.

Roadside Clean-up: Monday 13th November, 9am

Help keep our stretch of the Pyrenees Highway clean!

Come along and help do our bit for the community. More hands, quicker work. And you never know what treasure you might find!

Meet: 9am near Tait's Decorative Iron, corner of Willy Milly Rd and Pyrenees Highway, Castlemaine.

Bring: Gloves, water, sturdy footwear. Garbage bags and safety vests supplied.

Contact: Geoff Harris if you can help with the clean-up.

Castlemaine Field Naturalists Club
PROGRAM

Monthly meetings are held in the Uniting Church Hall, Lyttleton Street, Castlemaine, commencing at 7.30pm.

Members and visitors are invited to share their interesting observations at these meetings. Please email any photos to illustrate your report as JPEG file(s) to Euan Moore by noon on the day of the meeting.

Excursions (Saturday following the monthly meeting) leave from the car park opposite the Castle Motel, Duke Street at 1.30pm unless stated otherwise.

See 'Coming Events' page for more details about November events.

Fri November 10th, Meeting 7.30pm (UCH - Chapel). Sophie Bickford (Executive Director, Central Victorian Biolinks Alliance) "Community-connected Conservation across Central Victoria".

Sat November 11th, Excursion 1.00pm. Ian Higgins "Managing Remnant Vegetation". Visit to a grasslands site south of Campbelltown.

Fri December 8th, Meeting 7.30pm (UCH). Members' night. A chance to share your nature highlights from the year.

Tue December 12th. Picnic, Castlemaine Botanical Gardens, 5pm onwards.

VISITORS ARE WELCOME AT CLUB ACTIVITIES

Castlemaine Naturalist - email newsletter material to: newsletter.cfnc@gmail.com
* Deadline for the December edition: 24th November
Club website (Webmaster: Ron Wescott) –
www.castlemainefieldnaturalists.org.au
Subscriptions (Membership forms on CFNC website)
Ordinary membership: Single $35, Family $50
Pensioner or student: Single $25, Family $30
Subscription includes the monthly newsletter, Castlemaine Naturalist.

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	Jill Williams

Castlemaine Field Naturalists Club Inc. PO Box 324, Castlemaine, 3450.
Inc. #A0003010B